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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/321,809	05/28/1999	RICHARD L. FRANK	ORA99-07(OID)	7075

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HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
530 VIRGINIA ROAD
P.O. BOX 9133
CONCORD, MA 01742-9133

EXAMINER

TANG, KENNETH

ART UNIT PAPER NUMBER

2195

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/321,809	Applicant(s) FRANK ET AL.	
	Examiner Kenneth Tang	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,8,10,15,17,22,24 and 33-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,8,10,15,17,22,24 and 33-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 May 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the Amendment filed on 12/16/05. Applicant's arguments have been fully considered but are now moot in view of the new grounds of rejections.
2. Claims 1, 3, 8, 10, 15, 17, 22, 24, and 33-40 are considered for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 3, 8, 10, 15, and 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claims 1, 8, and 15, the limitation "wherein the memory allocated to the donor process is not owned by the donor process" does not comply with the written description requirement. On page 8, lines 23-24 of the Specification, it states "a donor process 208 includes one or more software routines resident in memory". Nowhere in the cited portions by the Applicant or in the rest of the Specification does it teach "memory allocated to the donor process is not owned by the donor process". The Specification indicates on pages 9-10 (particularly in pg. 10, lines 1-6), that before any transferring takes place, the memory allocation to the donor process is owned by the donor process. In addition, the donor process is the process capable of

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deallocation of the memory (pg. 12, lines 18-30). In order for this to happen, the donor process must own the memory.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 3, 8, 10, 15, 17, and 37-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:

a. In claims 1, 8, and 15, the limitation “wherein the memory allocated to the donor process is not owned by the donor process” is indefinite because it is not understood nor made clear in the claim language how a memory allocated to the donor process is not owned by the donor process. There is also a lack of written support in the Specification for this limitation. This limitation does not make sense and it is an inaccurate way to express transfer of ownership.

b. In claims 37-40, the limitation “is to caused to sleep after transforming...” is grammatically incorrect, doesn’t make sense, and therefore, indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 22 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Wagner (US 5,940,868).

3. As to claim 22, Wagner teaches an apparatus for allocating to a process in a computer (memory allocation method and apparatus) (*see Title*) comprising:

means for, creating a plurality of processes, each process being allocated an amount of memory, the processing including one consumer process (request to access resource) (*col. 3, lines 40-51 and col. 4, lines 1-7*) and donor process (software routines) (*col. 1, lines 5-44, col. 3, lines 40-51 and col. 4, lines 1-7*); and

means for, pooling (aggregating) the memory of the processes together for use by consumer process (*col. 1, lines 59-67, claim 11*).

4. It is noted that the broadest reasonable interpretation of a consumer process is merely a process that requests to access a resource. The broadest reasonable interpretation of a donor process is merely a process that includes one or more software routines. The Applicant's Specification does not contradict this.

5. Wagner teaches that a processor assembly 20 performs the means for above with memory for the processes to be allocated to (*col. 3, lines 40-52, etc.*).

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6. As to claim 24, Wagner teaches wherein the number of donor processes determined from the amount of allocated memory requested by the consumer process, each donor process donating allocated memory to the consumer process (*col. 1, lines 5-44, col. 3, lines 40-51 and col. 4, lines 1-7*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1, 3, 8, 10, 15, 17, and 33-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner (US 5,940,868) in view of Fishler et al. (hereinafter Fishler) (US 5,931,903).**

8. As to claim 1, Wagner teaches a method for allocating memory to a process on a computer (memory allocation method and apparatus) (*see Title*), the method comprising:
creating a plurality of processes (creating a multiplicity of processes) (*col. 1, lines 59-65*), each process being allocated a respective amount of memory, the processes including one consumer process (request to access resource) (*col. 3, lines 40-51 and col. 4, lines 1-7*) and a donor process (software routines) (*col. 1, lines 5-44, col. 3, lines 40-51 and col. 4, lines 1-7*); and

pooling (aggregating) the allocated memory for the processes together for use by the consumer process (*col. 1, lines 59-67, claim 11*).

9. It is noted that the broadest reasonable interpretation of a consumer process is merely a process that requests to access a resource. The broadest reasonable interpretation of a donor process is merely a process that includes one or more software routines. The Applicant's Specification does not contradict this.

10. Wagner fails to explicitly teach wherein the memory allocated to the donor process is not owned by the donor process. However, Fishler teaches transferring from one process to another through a device driver (*col. 2, lines 66-67 through col. 3, lines 1-3 and 20-33, col. 6, lines 39-44*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Wagner and Fishler because it would improve the ease of maintenance of processes while still allowing efficient transfer of data (*col. 2, lines 25-28*).

11. As to claim 3, Wagner teaches wherein the number of donor processes determined from the amount of allocated memory requested by the consumer process, each donor process donating allocated memory to the consumer process (*col. 1, lines 5-44, col. 3, lines 40-51 and col. 4, lines 1-7*).

12. As to claim 8, it is rejected for the same reasons as stated in the rejection of claim 1.

13. As to claim 10, it is rejected for the same reasons as stated in the rejection of claim 3.

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14. As to claim 15, it is rejected for the same reasons as stated in the rejection of claim 1. In addition, it is inherent that the computer system has a central processing unit (CPU).

15. As to claim 17, it is rejected for the same reasons as stated in the rejection of claim 3.

16. As to claims 33-35, Fishler teaches wherein the donor process transfers ownership of allocated memory to a driver (*col. 2, lines 66-67 through col. 3, lines 1-3 and 20-33, col. 6, lines 39-44*).

17. As to claim 36, Wagner fails to explicitly teach wherein the donor process transfers ownership of allocated memory to a driver. However, Fishler teaches wherein the donor process transfers ownership of allocated memory to a driver (*col. 2, lines 66-67 through col. 3, lines 1-3 and 20-33, col. 6, lines 39-44*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Wagner and Fishler because it would improve the ease of maintenance of processes while still allowing efficient transfer of data (*col. 2, lines 25-28*).

18. As to claims 37-40, Wagner and Fishler is silent that the donor process sleeps after transferring ownership. However, it would be obvious to one of ordinary skill in the art for a process to sleep after it has transferred ownership and it is no longer needed because this would improve the efficiency of processing.

Response to Arguments

19. During patent examination, the pending claims must be “given their broadest reasonable interpretation consistent with the specification.” *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

20. Applicant’s arguments regarding prior art have been fully considered but are now moot in view of the new grounds of rejections.

21. *Applicant argues on page 6 regarding the rejections under Section 112, 1st paragraph. Applicant argues that the limitation “memory allocated to the donor process is not owned by the donor process” is disclosed and taught on page 9, lines 25-27 and page 10, lines 1-2 of the Specification.*

In response, the Examiner respectfully disagrees. Nowhere in the cited portions or in the rest of the Specification does it teach “memory allocated to the donor process is not owned by the donor process”. The Specification indicates on pages 9-10 (particularly in pg. 10, lines 1-6), that before any transferring takes place, the memory allocation to the donor process is owned by the donor process. In addition, the donor process is the process capable of deallocation of the memory (pg. 12, lines 18-30). In order for this to happen, the donor process must own the memory. Finally, the Examiner notes that the claim language of that limitation is incorrect and not supported in the Specification.

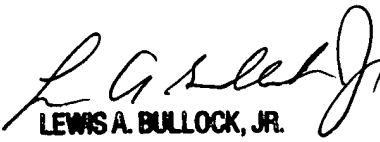
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
1/31/06


LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER